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STATEMENT OF ROBERT J. HALSTEAD ON BEHALF OF THE STATE OF NEVADA AGENCY FOR NUCLEAR PROJECTS REGARDING U.S. DEPARTMENT OF ENERGY'S DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR A GEOLOGIC REPOSITORY FOR THE DISPOSAL OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE AT YUCCA MOUNTAIN, NEVADA

PRESENTED AT THE PUBLIC HEARING IN ST. LOUIS, MISSOURI JANUARY 20, 2000

Transportation of spent nuclear fuel (SNF) and high-level radioactive waste (HLW) is inherently risky business. At previous hearings, our preliminary transportation comments have addressed specific deficiencies in DOE's Draft Environmental Impact Statement (DEIS) regarding the radiological hazards of the SNF and HLW that DOE proposes to ship to Yucca Mountain, the shipment modes and routes, the risks associated with legal weight truck (LWT) transport, the vulnerability of shipments to human initiated events including terrorism and sabotage, DOE's failure to identify a preferred rail access corridor to Yucca Mountain, DOE's failure to demonstrate the feasibility of heavy haul truck (HHT) transportation from an intermodal transfer station to the proposed repository, impacts of rail construction and operation, impacts on Native American lands and cultural resources, and social and economic impacts of public perception of transportation risks. These statements are available on the web at www.state.nv.us/nucwaste. At upcoming hearings we will address radiological health effects of routine transportation and radiological consequences of severe accidents.

1 **Today our comments focus on DOE's failure to identify the cross-country truck and rail routes evaluated in the DEIS. The draft EIS fails to identify the specific transportation routes for spent fuel and HLW shipments from specific reactor and generator locations to Yucca Mountain despite the fact that these routes were used in the analyses contained in the DEIS and Appendix J. DOE, in effect, has chosen to hide these routes and simply report the analyses in a generic fashion.**

2 **The manner in which the comment period and public hearings were noticed by DOE was and is misleading and intended to suppress public participation and public comments. DOE Notices make no reference to the specific transportation routes, the types and volumes of shipments along each route, and the impacts to specific communities along identified routes.**

3... **Under the DEIS mostly truck scenario, DOE's preferred Nevada route to Yucca Mountain is I-15, the Las Vegas Beltway (I-215), and US 95. Using the HIGHWAY model, DOE contractors generated national routes from the 77 shipping sites to connect with the Las Vegas Beltway. These national routes are not revealed in the DEIS, but they are disclosed in the DEIS references, which can be accessed on the worldwide web at www.ymp.gov/timeline/eis/trw1999udata.**

The routes used for the mostly truck impact analysis in the DEIS correspond to actual cross-country routes to I-15 and the Las Vegas Beltway. These routes generally are I-80 for shipments from the Northeastern and North Central states, I-70 for shipments from Southeastern and Midwestern states,

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3 cont. and I-10 and I-40 for shipments from South Central and Southwestern states. Shipments from the Pacific Northwest and Idaho use I-84 and I-15. Shipments from Arizona and California use I-5, I-10, and I-15. [See DEIS reference TRW 1999udata, Chapter 4, file bt_map.prn. The origin-destination distances generated in miles in this file correspond to the origin-destination distances given in kilometers in DEIS Table J-11] The DEIS compares the transportation impacts calculated for the preferred route with impacts for six potential alternative routes identified by the State of Nevada to minimize shipments through the Las Vegas Valley. [See Table J-48]

The routes used in the DEIS make Missouri one of the more heavily affected corridor state for truck shipments to Yucca Mountain, but the DEIS make no specific reference to transportation impacts in Missouri. One of the major truck routes to Yucca Mountain enters Missouri on I-270 from Illinois, travels through the St. Louis area to connect with I-70 at St. Charles, follows I-70 to I-435 in Kansas City, Missouri, and reconnects with I-70 through Kansas, Colorado, and Utah. According to the DEIS references, this route travels 250 miles in Missouri. Truck shipments using this route are presented in Table 1. Under the mostly truck scenario, proposed action, more than 18,000 truck shipments of SNF and HLW (about 37% of the total) traverse Missouri over 24 years. Under the mostly truck scenario, modules 1 & 2, 29,000 truckloads of SNF, HLW, and other radioactive wastes requiring geologic disposal (about 30% of the total) traverse Missouri over 39 years. Under either scenario, an average of two trucks per day would travel through St. Louis and Kansas City every day for decades. Additionally, Missouri would be traversed by up to 1,000 truckloads of greater-than-Class-C low level radioactive wastes from commercial reactors to Yucca Mountain during the same time period.

4 Rail shipments to Yucca Mountain would also heavily impact Missouri. The DEIS evaluated four rail routing scenarios using the INTERLINE model. Under the DEIS routing scenarios, rail shipments to Yucca Mountain traverse Missouri on six rail lines, primarily (1) the Union Pacific from East St. Louis, Illinois to Kansas City, Kansas via St. Louis, Pacific, Jefferson City, Marshall, Sheffield, and Kansas City, Missouri (301.9 route miles in Missouri); and (2) the Norfolk Southern from Madison, Illinois to Kansas City, Missouri, via Merchants Bridge, Mexico, Centralia, Clark, Moberly, Carrollton, Norborne, Hardin, Henrietta, and Birmingham (273.7 route miles in Missouri). Rail shipments along these routes are presented in Table 2. Under the mostly rail scenario, proposed action, more than 4,000 rail shipments (about 37% of the total) traverse Missouri over 24 years. Under the mostly rail scenario, modules 1 & 2, almost 6,400 rail shipments (about 32% of the total) traverse Missouri over 39 years. Under either scenario, an average of 3 rail casks per week would travel through Missouri every week for decades. Additionally, St. Louis and Kansas City would be traversed by 670 to 1,010 truck shipments of SNF from Florida reactors, an average of 26 to 28 truck shipments per year, during the same time period.

TABLE 1			
YMDEIS TRANSPORTATION IMPACTS			
TRUCK SHIPMENTS THROUGH MISSOURI ON I-70			
DOE MOSTLY TRUCK SCENARIO			
DOE BASE CASE ROUTING			
		Proposed Action	Modules 1&2
Truck Shipments of Commercial SNF			
Browns Ferry(AL)		1175	2067
Crystal River(FL)		283	442
St. Lucie(FL)		681	1086
Turkey Point(FL)		582	871
Hatch(GA)		871	1334
Vogtle(GA)		593	1462
Wolf Creek(KS)		349	708
Callaway(MO)		392	735
Brunswick(NC)		540	903
Harris(NC)		450	921
McGuire(NC)		823	1464
Catawba(SC)		643	1,330
Oconee(SC)		1007	1500
Robinson(SC)		231	306
Summer(SC)		291	538
Sequoyah(TN)		560	1179
Watts Bar(TN)		146	840
North Anna(VA)		634	1079
Surry (VA)		647	902
Corridor Subtotal		**10898**	**19667**
Truck Shipments of DOE SNF & HLW			
DOE-Savannah River(SC)	SNF	1316	1411
DOE-Savannah River(SC)	HLW	6055	6200
DOE-Savannah River(SC)	GTCC	0	350
DOE-Savannah River(SC)	SPAR	0	1470
Corridor Subtotal		**7371**	**9431**
Missouri Total		**18269**	**29098**

TABLE 2		
YMDEIS TRANSPORTATION IMPACTS		
RAIL SHIPMENTS THROUGH MISSOURI		
DOE MOSTLY RAIL SCENARIO		
DOE BASE CASE ROUTING		
	Proposed Action	**Modules 1&2**
UP from East St. Louis to Kansas City, KS (301.9 miles in MO)		
Browns Ferry(AL)(SNF)	327	590
St Lucie 2(FL)(SNF)	88	140
Turkey Point(FL)(SNF)	145	228
Brunswick(NC)(SNF)	201	321
Harris(NC)(SNF)	150	258
McGuire(NC)(SNF)	253	427
Robinson(SC)(SNF)	75	97
DOE-Savannah River(SC)(SNF)	149	159
DOE-Savannah River(SC)(HLW)	1200	1240
DOE-Savannah River(SC)(GTCC)	0	75
DOE-Savannah River(SC)(SPAR)	0	290
Corridor Subtotal	**2588**	**3825**
NS from Madison, IL to Kansas City, MO to UP at Kansas City, MO (273.3 miles in MO)		
Farley(AL)(SNF)	103	157
Hatch(GA)(SNF)	128	197
Vogtle(GA)(SNF)	195	431
Catawba(SC)(SNF)	148	253
Oconee(SC)(SNF)	254	373
Summer(SC)(SNF)	46	82
Sequoyah(TN)(SNF)	90	161
Watts Bar(TN)(SNF)	21	121
Corridor Subtotal	**985**	**1775**
NS from Jacksonville, IL to Kansas City, MO to UP at Kansas City, MO (206.1 miles in MO)		
Surry(VA)(SNF)	105	144
KCS from Sallishaw, OK to Kansas City, KS (185.3 miles in MO)		
Grand Gulf(MS)(SNF)	76	143
KCS from Fulton, MO to Kansas City, KS (180.7 miles in MO)		
Callaway(MO)(SNF)	62	114
UP from Olathe, KS to Kansas City-Union, MO to Kansas City, KS		
Arkansas(AR)(SNF)	170	252
Wolf Creek(KS)(SNF)	52	106
Corridor Subtotal	**222**	**358**
Missouri Total	**4038**	**6359**